IN THE SPECIFICATION

Please replace the paragraphs comprising lines 25-34 of page 3 and lines 1-25 of page 4, with the following:

In conformity with claim 2, the <u>The</u> similarity comparison <u>discussed above</u> can be performed by means of the known "dynamic time warping" method. This method enables a very fast and efficient execution of the similarity comparison.

If the object motion is known in principle, so that additionally information can be provided on the states of motion assumed by the object between the acquisitions of the images of the image sequence, artificial intermediate images can be formed for these states of motion by interpolation. For example, the motions performed by some organs during respiration can be sufficiently accurately described by means of a motion model. In conformity with claim 3 it it is then possible to form an image which represents as well as possible the state of motion assumed by the object during the acquisition of the reference image. This is advantageous notably when the difference between the actual instants of acquisition of the images of the image sequence and the correspondence instant is so large that too many artefacts are produced, for example, in a subtraction image. The interpolation of intermediate images can also be advantageously used when only few images can be acquired for the image sequence during the object motion.

advantageously in systems in which images and image sequences of a human or animal heart are formed and, moreover, an ECG of the cardiac motion is available. The method in accordance with a preferred aspect of the invention provides reliable determination of images representing the same state of motion of the heart notably in the case of patients who, because of disease or given physical conditions, have cardiac cycles whose ECGs exhibit non-linear distortions relative to one another.

In conformity with claim 5, the The method disclosed via the present disclosure is may be used in systems in which subtraction angiography is carried out. Imaging methods which are suitable for the acquisition of images of states of motion of the heart may be X-ray systems in conformity with claim 6 and/or ultrasound systems in conformity with claim 7. However, imaging systems which produce slice images or volume images, such as magnetic resonance tomography

apparatus or X-ray computed tomography apparatus, will in the very near future also be capable of recording states of motion of the heart. The method can then be used accordingly.

Therefore, in conformity with claim 8 it is particularly advantageous to use the method in a system which comprises a data processing unit of the kind used in contemporary imaging systems in the medical field. An For example, an X-ray examination system may be provided with such a system in accordance with claim 9. If the data processing unit is constructed so as to be programmable, a computer program or computer program product as claimed in claim 10 can enable the data processing unit to carry out the method in accordance with the invention.